

NEST MORPHOMETRY OF PHEASANT-TAILED JACANA (*HYDROPHASIANUS CHIRURGUS*)

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Pheasant-tailed Jacana (*Hydrophasianus chirurgus*), the largest of the Jacanidae family (Austin, 1983) is perfectly adapted to an aquatic life with their long toes and claws which enable their body weight to be spread over, facilitating them to walk and run on floating aquatic vegetation (Ramachandran, 1993). The Pheasant-tailed Jacana is a polyandrous bird (Tarboton, 1992) wherein the female mates with more than one male during a particular breeding season. The male builds the nest and the female lays a clutch of 2-4 eggs in each nest (Geetika, 1992). This report highlights the characteristic nesting habits of Pheasant-tailed Jacana.

The study was conducted at Madhavaram Jheel (13°15' N, 80°00' E), Chennai from March to September 1998, which is a biologically rich wetland ecosystem supporting predominantly Pheasant-tailed Jacana with several other wetland avifauna in an area of 30 acres. The characteristic poorly built floating nest of Pheasant-tailed Jacana (Ali & Ripley, 1983) was studied in relation to the substrate, pattern of nest building and nest characteristics.

Nesting habits such as pattern of nest building, nesting materials used were observed by using standard field binoculars (8x40). During the study period, two abandoned nests A and B with four eggs and three eggs respectively were identified. These nests would have got disturbed by the grazing cattle or by the snail gatherers in the jheel and therefore settled towards the boundaries of the jheel.

The diameter of the nests were measured in centimeters and the circumference of the nests was calculated. The approximate

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weight of the empty nests were measured and the materials used for nesting were identified.

The Madhavaram Jheel, with abundant floating vegetation, forms an ideal breeding and nesting habitat for the Pheasant-tailed Jacanas. The vegetation used for nesting were identified as *Pistia* sp. and *Jussuiae repens*. The Jacanas build their nest by pulling the *Pistia* sp. using their beak and legs, and aggregating them to a relatively compact mass with *Jussuiae repens*.

Tarboton (1992) opined that the nests of Jacana were more difficult to locate when they were hidden in vegetation and as a result the clutches had a significantly higher rate of survival. Observations in the present study revealed that the lotus leaves were not primarily used for nesting but in some cases their stems were used for anchorage to prevent nest movement.

Ramachandran (1993) opined that the substrate of the nests of Pheasant-tailed Jacana were grass float and decayed grass litter with or without live vegetation. In the Madhavaram Jheel, presence of abundant floating vegetations of *Pistia* sp. and *Jussuiae repens* formed an ideal substrate for breeding and nesting of Pheasant-tailed Jacana.

Urban *et al.*, (1986) opined that the African Jacana nest was a flimsy, sodden platform of aquatic plant stems heaped upon floating vegetation. Geetika (1992) reported that the Jacana's nest was a floating structure of weeds and grasses containing eggs which looked as if they were just floating on the water and many times the eggs were found half immersed in the water. In this study, it was observed that the surface of the nests was flat without any hollow depth for holding the eggs and these were present as such on the centre of the floating nest. The nest of Pheasant-tailed Jacana looked like a floating raft on water.

Nest	Clutch Size	Diameter (cm.)	Radius (cm.)	Nest circum ference	Weight of the empty nest (g.)
A	4	22	11	69.08	400
B	3	16	8	50.24	215

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